

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 2023;
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/519,547	03/06/2000	Jozeph W. Triepels	PHN 17,327	8969
7:	590 07/03/2002			
C/O U.S. PHILIPS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 580 WHITE PLAINS ROAD TARREST AND TOTAL DEPARTMENT			EXAMINER	
			NGUYEN, TRUC T	
TARRYTOWN, NY 10591			ART UNIT	PAPER NUMBER
			2833	
			DATE MAILED: 07/03/2002	2

Please find below and/or attached an Office communication concerning this application or proceeding.

			ML			
		Application No.	Applicant(s)			
		09/519,547	TRIEPELS ET AL.			
	. Office Action Summary	Examiner	Art Unit			
•		Truc T. T. Nguyen	2833			
Period fo						
THE I - Exter after - If the - If NO - Failu	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA asions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communicate period for reply specified above is less than thirty (30) day period for reply is specified above, the maximum statutor re to reply within the set or extended period for reply will, eply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION. CFR 1.136(a). In no event, however, may a reply ation. ys, a reply within the statutory minimum of thirty (30 y period will apply and will expire SIX (6) MONTHS	be timely filed D) days will be considered timely. Forom the mailing date of this communication. DONED (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed	on <u>25 <i>April</i> 2002</u> .				
2a)⊠	Time desired to the	This action is non-final.				
3)□ Disposit	Since this application is in condition fo closed in accordance with the practice ion of Claims	r allowance except for formal matter under <i>Ex parte Quayle</i> , 1935 C.D.	rs, prosecution as to the merits is 11, 453 O.G. 213.			
•	Claim(s) 1-3 and 5-10 is/are pending in	n the application.				
,	4a) Of the above claim(s) is/are v					
5)						
•	6)⊠ Claim(s) <u>1-3 and 5-10</u> is/are rejected.					
	7) Claim(s) is/are objected to.					
	Claim(s) are subject to restrictio	n and/or election requirement.				
	ion Papers					
9) 🗌	The specification is objected to by the E	xaminer.				
10)	The drawing(s) filed on is/are: a)	\square accepted or b) \square objected to by the	Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)	The proposed drawing correction filed o	n is: a)∏ approved b)∐ disa	approved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.						
12)	The oath or declaration is objected to by	y the Examiner.				
	under 35 U.S.C. §§ 119 and 120					
13)	Acknowledgment is made of a claim fo	r foreign priority under 35 U.S.C. §	119(a)-(d) or (f).			
а) ☐ All b) ☐ Some * c) ☐ None of:					
	1. Certified copies of the priority do					
	2. Certified copies of the priority do	ocuments have been received in App	plication No			
*	See the attached detailed Office action	for a list of the certified copies not re	eceived.			
14)	Acknowledgment is made of a claim for	domestic priority under 35 U.S.C. §	119(e) (to a provisional application).			
	a) The translation of the foreign language Acknowledgment is made of a claim for	uage provisional application has bee	en received.			
Attachme						
1) No	tice of References Cited (PTO-892) tice of Draftsperson's Patent Drawing Review (PTC ormation Disclosure Statement(s) (PTO-1449) Pap	D-948) 5) Notice of In	ummary (PTO-413) Paper No(s) formal Patent Application (PTO-152)			

Art Unit: 2833

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-3, 6, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzery (US 4,012,117) in view of Lightbody et al (US 4,528,500).

Regarding claims 1-2, Lazzery discloses a display device (20) comprising a first substrate (90) having conductor pattern (106) and electrically conducting connections (24) between the pattern and conducting tracks (40) on a support (12), said conducting connection comprising a resilient connection (70, 78).

Lazzery does not disclose the resilient connection comprises a resilient pin which provides variable-pressure metal-metal contact.

Lightbody et al disclose a resilient connection pin (12) providing variable-pressure metalmetal contact.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a resilient connection pin of Lightbody et al into Lazzery's display device, for ease of replacement when a single contact is malfunction.

Lazzery does not specifically disclose the metal-metal contact is a chosen from the group of gold, silver and nickel. Lazzery only disclose the metal-metal contact is made by copper clad

Art Unit: 2833

gold. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a gold material into Lazzery's contacts for good conductivity. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 3, modified device of Lazzery in view of Lightbody et al discloses the metal-metal contact is present at the area of the first substrate.

Regarding claim 6, modified device of Lazzery in view of Lightbody et al discloses the conductor pattern on the first substrate faces the support.

Regarding claim 8, modified device of Lazzery in view of Lightbody et al discloses the display device comprises a second substrate (92) opposite from part of the first substrate (90) and an electro-optical material (93) between the two substrates, each being provided with substrate electrodes (94) which define pixels with the electro-optical material, the first substrate being provided with the conductor pattern beyond the part of the first substrate located opposite the second substrate.

Regarding claim 10, modified device of Lazzery in view of Lightbody et al discloses a part of the conductor pattern is connected in an electrically conducting manner to a conducting track on the side of the support remote from the first substrate.

8. Claims 5 and 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzery (US 4,012,117) in view of Lightbody et al (US 4,528,500) as applied to claim 1 above, and further in view of Hiramoto et al (US 5,847,783).

Art Unit: 2833

Modified device of Lazzery in view of Lightbody et al substantially discloses the claimed invention except the conducting connection between the resilient conductor and the conductor pattern comprises an anisotropically conducting foil.

Hiramoto et al discloses an anisotropic conducive adhesive (20) is used in the liquid display (column 4, lines 20-23).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an anisotropical material into Lazzery's conducting connection, as taught by Hiramoto et al for electrically conducting purpose.

Regarding claim 9, modified device of Lazzery in view of Lightbody et al substantially discloses the claimed invention except the display device comprises an electroluminescent material.

Hiramoto et al discloses an electroluminescent layer (15c) is used in the liquid display (column 4, lines 9-13).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an electroluminescent material into Lazzery's liquid display, as taught by Hiramoto et al providing self emitting light to the display.

9. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzery (US 4,012,117) in view of Lightbody et al (US 4,528,500) as applied to claim 1 above, and further in view of Iguchi (US 5,233,451).

Lazzery substantially discloses the claimed invention except the electrically conducting connection comprising a conducting part which encloses the edge of the first substrate.

Art Unit: 2833

Iguchi disclose a conducting element (23) which encloses the edge of the substrate (16) for used in a liquid display.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a conducting element encloses the edge of Lazzery's first substrate, as taught by Iguchi for better electrical connection.

Response to Arguments

1. Applicant's arguments filed 4/25/2002 have been fully considered but they are not persuasive. Because:

In response to applicant's argument on page 3, line 12 to page 5, line 17. The examiner respectfully disagrees for the following reason.

The Examiner recognizes that references cannot be arbitrarily combined and that there must some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is that the combination of disclosures taken as a whole would suggest to one of ordinary sill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 UPSQ 545 (CCPA 1969).

In this case, the Lazzery's rubber part and conductor wrapped around part as a whole that define a contact assembly. Wherein each conductor on the conductor wrapped around part defines one contact of the contact assembly. Each contact pin of Lightbody is equivalent to one

Art Unit: 2833

Lazzery's contact. Therefore, plurality of contact pins arrange in a row would yield an equivalent function as the same as Lazzery's contact assembly. Lightbody taught a contact pin that is used to electrically conducting electronic signal two contact traces. The examiner does not modify the Lazzery's rubber part to become a contact pin. The examiner modified Lazzery's contact assembly by replacing it with a row of Lightbody's contact pins. This modification only requires a routine skill to one in the art.

In response to applicant's argument, on page 4, lines 16-26. The examiner respectfully disagrees. Once the contact assembly (24) of Lazzery is substitute by a row of pin contacts then there is no bow effect and a present of the projection (80) is not needed.

Conclusion

2. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2833

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. Nguyen whose telephone number is (703) 306-4004. The examiner can normally be reached on Monday through Thursday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Austin Bradley, can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

T. Nguyen

June 19, 2002

TECHNOLOGY CENTER 2800

Page 7